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Correspondence and Communications

Comment on: "A structured pathway for accelerated postoperative recovery reduces hospital stay and cost of care following microvascular breast reconstruction without increased complications"

Dear Sir,

We read with great interest a recent article by O'Neill et al.[1] on the implementation of an accelerated postoperative recovery protocol following DIEP flap breast reconstruction. Our department has formally introduced a DIEP Enhanced Recovery After Surgery (ERAS) Pathway in May 2019. We would also like to share the findings of a closed-loop audit that we recently completed, which reviewed the effectiveness of this pathway and the surgical outcome of our patients.

Although in a much smaller sample size, our results were similar to this article and we would agree with the authors' conclusion that implementation of such protocol could effectively reduce the length of inpatient stay (LoS) and cost of care, without compromising patient care nor increasing complication rates. Prior to the introduction of ERAS Pathway, 28 of our patients who had DIEP between November 2018 and May 2019 had an mean LoS of 7.1 days (median 6 days, range 5–21 days); whereas 27 patients who experienced the ERAS Pathway between May and December 2019 had an mean LoS of 4.8 days (median 5 days, range 3–7 days). The cost of inpatient stay in a normal ward at our hospital is approximately £232 per patient per day. Prior to the COVID-19 pandemic, there are an estimated of 60 DIEP performed annually at our department. If we extrapolate our result, by reducing an extra 2.3 days of inpatient stay on these 60 patients, the Trust could save at least an average of £32,016 per annum.

Interestingly, we note that amongst the authors' patient cohort, there were patients with BMI up to 46 and active smoker who received microvascular breast reconstruction in both pre- and post-protocol groups. In our department, only patients with BMI less than 32 and who have stopped smoking for three months would be listed for DIEP. This is because both of these factors can significantly increase the perioperative risks and surgical complications.[2,3] For our patients who do not meet these criteria, our Breast Reconstruction Clinical Nurse Specialists would direct them to the right resource and closely follow them up. Once they reach their target range, they would be reviewed at outpatient clinic and listed for the surgery.

We also do not routinely commence Aspirin for our DIEP patients post-operatively, as the authors did for 6 weeks. Our patients would only receive low molecular weight heparin (LMWH) whilst they are inpatient post-operatively as a form of venous thromboembolism (VTE) prophylaxis and this would be discontinued upon discharge. None of our patients had pulmonary embolism nor deep venous thrombosis. There was one patient in each pre- and post-ERAS group who had haematoma and required evacuation; one patient with bilateral DIEP in pre-ERAS group who unfortunately had total flap loss. In a systematic review and meta-analysis, Lee and Mun[4] concluded that the use of antithrombotic had no significant effects on free flap survival and in fact, they could increase the incidence of haematoma. On balance, we think that the early mobilisation that ERAS advocates and the use of prophylactic LMWH are sufficient as VTE prophylaxis in this group of patients. By adding another antithrombotic agent, it might in return increase flap complications.

We do acknowledge the different healthcare system, clinical practice and patient cohort between UK and Canada might explain some of the difference in the delivery of patient care. The optiFLAPP study[5] published in 2018 has also demonstrated a marked variation in the perioperative care of women undergoing abdominal-based microvascular breast reconstruction in the UK itself. However, what we would like to highlight to our readers are the benefits and effectiveness of this multimodal, patient-centre and evidence-based ERAS. This, perhaps, should be the standard of care for all patients who undergo microvascular breast reconstruction in the future.

Ethical consideration

None.

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Declaration of Competing Interest

None.

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